

# Activity report

## MainSafeTraceJapan

- Short summary of activities in the MainSafeTraceJapan

# May 2009

- Establishing and distributing project consortium documents
- Trip to Bergen
  - Kick off meeting with NSS. Discussions on project organisation and activities
- Trip to Japan (Jostein)
  - Meetings with project partners; FMRIC (research institute), Maruha and Sojitz (importers), Meiden Software.
  - Meeting with Norwegian embassy regarding project partner NRIFS which suddenly was refused to participate by MAFF (Ministry of Forestry and Fisheries)
  - Meeting with a large group of Norwegian journalists visiting Japan
  - Meeting with Japan Broadcasting Corporation
  - Meeting with Norwegian ambassador to Japan
  - Short meeting with EFF

# June

- Receiving consortium agreement documents
- Follow up on Japanese partner NRIFS

# July

- Software development / adaptation (WP2 preliminary work)
  - a prototype of OST (Open Source Tracker) as a .NET version was made
  - OST comes with an optional web interface used to view, generate and exchange traceability messages
  - OST may also translate traceability message from one language to another, such as from English to Japanese, Chinese etc. and vice versa

# August

- Finalization of OST prototype
- Establishing operational plan for WP1
- Planning of next trip to Japan
  - Stakeholder analysis
  - Japanese software partner
  - Include NRIFS in the project again

# September

## Visit to Bergen

- Meeting with Atlantic Pelagic
- Agenda:
  - Planning of when, what and how to do samples of mackerel catch
  - Design of task for documentation of cold chain (RFID-temperature sensors)
- Meeting with NSS
  - Project status meeting
- Further planning of October trip to Japan
  - Meeting requests and scheduling
- Development of Stakeholder analysis questionnaire

# October

- Visit to Atlantic Pelagic at Austevoll October 6th – 8th
  - Process mapping of mackerel landing site, cold storage and exporter made
  - Samples of mackerel from one catch/batch of mackerel (fresh, frozen and refrozen) was taken and sent to SINTEF Fisheries and aquaculture in Trondheim
  - Detailed documentation of traceability and properties was made for the actual catch/batch
  - RFID-tags including temperature sensors was placed in 9 pallets of the actual batch.
- Visit to Japan
  - Meetings Meiden Software (further discussions on project participation). Meiden thinks that the project is very small.
  - Stakeholder analysis conducted at 3 importers; Maruha, Sojitz and Dolphin Trading
  - Meeting with Japan Broadcasting Corporation which is interested in making a TV program about the project
  - Short meeting with EFF
  - Trip to Yokohama and meeting with NRIFS, agreed to make an separate institute cooperation agreement

# November

- Production of reports from
  - Stakeholder analyses
  - Process mapping
- Trip to Japan - Petter Olsen (Nofima)
  - Process mapping work shop at Norwegian Embassy
  - Process mapping at Maruha cold storage



# December

- Planning activities for return of RFID temperature sensors and frozen mackerel
- Arrival of frozen mackerel in Tokyo
  - Collection of RFID tags
  - Returning frozen mackerel
- Reception of RFID tags and mackerel at SINTEF Trondheim

# Januar 2010

- Analysis of temperature data
  - Temperature data from transport between Norway and Japan
  - Measured by RFID temperature sensors
- Planning workshop, Bergen, Norway
- Funding of joint Japanese project (Jun Sakai, FMRIC)

# February 2010

- Annual national project meeting/workshop, Bergen, 2010.02.02
  - Presentation of results from 2009
  - Planning activities 2010, 2011
- Establishing a project eRoom
- Preliminary report on Norwegian Critical Control Points
- Preliminary report on cold chain results

# March 2010

- Planning and conducting of trip to Japan
- Joint annual meeting between the two cooperating projects; MainSafeTraceJapan (funded by Norwegian Research Council) and “The Implementation project of Lot Management system for traceability” (funded by Japanese MAFF).
- Participated in the steering committee meeting in the “Committee for Study of traceability in the mackerel supply chain”.
- Took part in internal meeting with MAFF. MAFF might be willing to extend the Japanese project to conduct more simulated recalls of Japanese mackerel.
- Meeting with Norwegian Export Council for fish.

# March 2010 continues

- Meeting with Prof. Yamashita at NRIFS and Per Christer Lund of the Norwegian of the Norwegian Embassy regarding research co-operation
- NRIFS and SINTEF will continue the long lasting co-operation within Traceability Control Mechanisms
- Carried out simulated recall test of Norwegian mackerel products bought in Japanese supermarkets
- Final meeting summing up the different activities and planning further progress. It was decided to try to arrange a work shop in Norway with Japanese participation in August/September 2010.

# March 2010 continues

- Took reference samples of Japanese mackerel from NRIFS to Norway
- Signed co-operation contract between Prof. Iciar Martinez of Instituto de Investigaciones Marinas – CSIC, Vigo, Spain. Area of co-operation: Traceability Control Mechanisms, DNA-analyses in particular.

# April 2010

- FMRIC finished simulated recall test in Japan for 4 products
- Follow up of Japan-trip.
- Project planning meeting in Tromsø (SFH and NOFIMA)

# May 2010

- Coordination of activities (All partners)
- Lab activities by IIM-CSIC (performed)
  - DNA extracted and analyzed of *S. scombrus* (Norwegian)
  - DNA extracted and analyzed of *S. colias* (Spanish)
  - DNA extracted and analyzing of *S. japonicus* (Received from NRIFS)
- Lab activities by NRIFS (agreed upon)
  - Analyses of samples frozen in Japan:
    - Histamine with a test kit
    - Fat content by NIR
    - Colour
    - Selenium
    - Mercury
  - Send to IIM-CSIC samples of these mackerel in ethanol for DNA analysis



# May 2010

- FMRIC, NOFIMA and SFH have started "simulated recall" (T1.4.2) in Japan for 35 mackerel products.
- FMRIC released a report (in Japanese) of the project of first year.
- Japanese version of Process mapping form was released at FMRIC web site (T1.2.3).

# June 2010

- WP1 Simulated recalls carried out
- WP 3: activity plan for 2010 approved by participating partners
- WP 3: Current results from mackerel 2009 analysis collected
- WP 3: List of analysis on desirable mackerels samples from the Japanese marked (agreed with partners)

# July-August 2010 –WP0

- SFH Preparing Industry meeting in Tokyo in June (postponed due to illness)
- SFH - Preparing scientific work shop in Trondheim August 31 – September 1. 2010

# July-August 2010 –WP 1

- SFH, NOFIMA and FMRIC all involved in Simulated Recall activity
  - Prepared workshop presentation on outcome of simulated recall activities
  - Prepared workshop presentation on process mapping methodology and results
- SFH –Updating Stakeholder analysis report
- SFH and NOFIMA –
  - Preparations for survey of ICT systems in the Norwegian pilot chain
  - Company visit, detailed mapping of data recording practice and ICT systems
  - Meeting with project owner (Norges Sildesalgslag) to report status and discuss options for the Electronic Data Interchange (EDI) that is to take place between Norway and Japan in this project
  - Meeting with Norwegian National Institute of Nutrition and Seafood Research (NIFES) to discuss possibility of collaboration to extract data on mackerel from their seafood component database

# July-August 2010 –WP 3

## IIM-CSIC activities

- Coordination of activities with NRIFS
- Lab activities by IIM-CSIC
  - Analyses of the sequences of the three species of Scomber: *S. scombrus*, *S. colias* and *S. japonicus*, with two different gene fragments: Cytb and ND5.
  - Comparison with *S. australasicus* from sequences from the GenBank
  - Extraction of DNA from Norwegian products
  - Purchased Spanish mackerel products
- Preparation and attendance to the Worskhop in Trondheim

# July-August 2010 –WP 3

## SINTEF activities

- Statistical analysis of GC and NMR data
- Collection of all activities and results from the first year
- Summarising results and preparation for project's workshop
- Project's workshop at SINTEF in Trondheim

# September WP0

- Scientific workshop in Trondheim (all scientific partners)
- SFH: minutes of meetings and presentations published on eRoom
- SFH: Distributed invitations to eRoom for all participants

# September WP1

- Nofima: Completed Activity 1.4 "Simulated Recalls of Mackerel Products". Finished and delivered report "Simulated recalls of Mackerel caught in Japan and Norway – A short Summary of the Results", sent to FMRIC for approval.
- SFH and Nofima: Worked on report "Kartlegging av IKT-systemer og tilgjengelighet av data hos Austevoll Fiskeindustri" which goes as input from WP1 to WP2.



# October WP1

- SFH and Nofima: Finished and delivered report "Kartlegging av IKT-systemer og tilgjengelighet av data hos Austevoll Fiskeindustri", sent to NSS for approval.
- SFH and Nofima: discussions relating to strategy and future plan for the MainSafeTrace project

# October WP2

- SFH submitting paper "Managing food traceability information using EPCIS framework" using pelagic processing as industrial case

# WP3 September

- Participation in workshop, Trondheim Norway
  - Presentation of results, WP3
  - Comparison of analytical procedures Norway/Japan
  - Discussion and planning of further work according to the viewpoint of Japanese importers/customers of which quality parameters to focus on.
- Collection of samples (fish, extracted oils and samples in ethanol) brought to Norway by Professor Yamashita:
  - 12 red labels: Mackerel sent from Norway
  - 4 light green labels: Norwegian mackerel processed in NRIFS lab
  - 17 dark green labels: Products purchased in Japan
  - 12 pink labels: *S. australasicus* products
  - 18 pink labels: *S. japonicus* products
  - 4 *S. scombrus* cold smoked, 4 hot smoked and 4 dried
  - 3 *S. japonicus* hot smoked
  - 3 *S. australasicus* hot smoked

# WP3 October

- Analysis of the collected Japanese samples
  - Histamine analysis of fish samples
  - Fatty acid composition analysis (GC) of oil samples
- Collection of Norwegian Mackerel
  - From production at Atlantic Pelagic 11.10.2010
- DNA extracted and the fragment Kocher analyzed of:
  - 12 red labels: Mackerel sent from Norway
  - 4 light green labels: Norwegian mackerel processed in NRIFS lab
  - 17 dark green labels: Products purchased in Japan
  - 12 pink labels: *S. australasicus* products